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ABSTRACT

Many adjustment problems may stem from the difference between initial expectations and later, experienced perceptions. To test this theory in relation to the social climate of university living units, and to assess initial perceptions and predictions of the future in relation to level of social exploration as a coping style, 92 entering freshmen completed the University Residence Environment Scale (URES) and the Edwards Social Exploration Scale. The URES was administered again, 12 weeks later. Results showed the freshmen were not able to predict accurately what their dormitory environment would be like. Males and females had similar initial perceptions and predictions. Freshmen with a more active social exploration preference both predicted and perceived their social environment differently than freshmen with a more passive preference. However, active preference freshmen did not predict their future environment any more accurately than passive preference freshmen. Examination of how students' expectations are formed is needed in order to provide accurate information for preventive intervention. (Author/JAC)

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Prediction and perception of psychosocial environment by entering college freshmen[1]

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Running head: Prediction and Perception

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[1]The data for this study was collected as part of a research project intended to fulfill the requirements for a Master of Arts degree at the University of Maryland. I am deeply indebted to the members of my thesis committee, Elizabeth Brown, Irwin Goldstein, Carolyn Sahni, and Edison Trickett, for their invaluable aid in directing this research. I wish to extend special thanks to Ed Trickett for all the guidance, support, and friendship he has shared with me during the course of the research and the preparation of this article. In addition, many thanks go to Roger Mitchell for his contributions of thoughts and ideas that eventually came to fruition in carrying out this research. Computer facilities for this reasearch were supplied by the University of Maryland Computer Science Department.

Abstract

Ninety-two entering college freshmen were administered the University Residence Environment Scale and the Edwards Social Exploration Scale in order to assess their expectations of future dormitory environment, their actual perceptions of that environment, and their level of social exploration as a coping style. The sampled freshmen were not able to predict accurately what their dormitory environment would be like. Male and female freshmen did not predict their future environment nor did they perceive their present environment differently from each other. Freshmen with a more active soical exploration preference both predicted and perceived their social environment differently than freshmen with a more passive preference. However, active preference subjects did not predict their future environment any more accurately than passive preference subjects. The data were examined with multivariate analysis techniques, and the results are discussed in the context of these statistical methods as well as in light of their implications for how college students adapt to new environments.

In order to design and implement truly preventive interventions, community psychologists must gain a clearer understanding of those settings and social forces that may foment adjustment difficulties. Indeed, theorists utilizing an ecological perspective (e.g., Bronfenbrenner, 1979, Trickett, Kelly & Vincent, in press) have recently underscored the importance of sensitivity to the larger systems that have a major impact upon the development and behavior of those within them.

Bronfenbrenner (1979) has stressed the potential heuristic value of those transitional times that mark the entry into a novel social setting. Further, it has been suggested that many adjustment problems may stem from situations wherein the initial expectations of new participants differ markedly from their later experienced perceptions (Moos, 1979, Zimbardo, Note 1). One particular setting in which participants' expectations and later experienced perceptions have been examined in some depth is the social climate of university living groups (e.g., DeYoung et.al., 1974; McKinnon, Note 2; Moos, 1979; West, Note 3). These studies have included residence hall staff, upperclassmen, and freshmen, but it seems reasonable to assume that the impact of the transition to a novel setting would be most significant for newly entering college freshmen without previous university residence hall experience. The present study attempts to examine the initial expectations and later experienced perceptions of the soical climates of university living units reported by newly entering college freshmen. These were examined

for the group in general, and then compared for groups determined by gender and level of social exploration as a coping style.

It has been noted that freshmen may often have very stereotypical, not to mention inaccurate, notions of what their social environment will actually be, and they may not be fully cognizant of the lifestyle that they will be experiencing (Feldman & Newcomb, 1969; Moos, 1979). For example, Moos (1979) reports that freshmen's expectations of their living environments vary much less than their reports of later perceptions. This tells us that the heterogeneity of the actual social setting was much greater than expected by the freshmen. Similarly, Feldman & Newcomb (1969) note that often freshmen are not fully aware of the freedom of lifestyle that they will experience as college students.

McKinnon (Note 2) and West (Note 3) report that entering freshmen made inaccurate predictions of the social climates of their dormitories across several dimensions, when compared with later reports of perception of the settings. For example, McKinnon (Note 2) reports that freshmen expected significantly higher levels of competitiveness, academic acheivement orientation, and traditional heterosexual interaction on their residence halls than they reported actually perceiving five months later.

It seems reasonable to examine these expectations and perceptions by themselves, in order to gain more insight into why the predictions do not match the experiences more accurately. For the most part, previous inquiry has been in the context of the comparisons of various subgroupings of freshmen, most notably gender comparisons. McKinnon (Note 2)

reports that, in a coed residence hall, entering freshmen males expected higher levels of independence on their living unit than females, while freshmen females expected higher levels of emotional support, traditional heterosexual interaction, intellectual activity, and formal structure than males. Based on reports of experienced perceptions of the actual environment, males experienced more involvement with the living group and independence than the females, while the females experienced more emotional support and formal structure than the males.

The above description typifies the extent of empirical inquiry up to this point. The present study will continue this focus by examining another sample of male and female freshmen and extend it by comparing groups based upon other variables. It is obvious that however fundamental gender differences appear to be, there are other personal qualities and characteristics whose influence may be as pervasive. Groupings along these characteristics need to be examined as well.

Since perceptions of social settings are being discussed, it is reasonable to examine a variable that indicates freshmen's adaptations to social settings. Edwards (1979) has noted that any continued participation in a social environment demands the development of some sort of adaptation or "fit" to that setting. One can actively interact with, or "explore" the environment or one's typical social response pattern can be of a more passive nature. Accordingly, Edwards (1971) has developed a scale that purports to measure these patterns of responding to the social environment and derives a "social exploration preference" score for each person.

Edwards (1979) further suggests that a passive adaptation, or "low exploration preference", will likely represent a poorer person-environment

fit and less personal growth than a more active one. A reasonable assumption, therefore, is that persons with a more active exploration preference - that is to say, having a better person-environment fit - would have different expectations and perceptions of their psychosocial environments than would persons with a more passive exploratory style. Indeed, while examining some of the aspects of various "personal functioning characteristics", Moos (1979) found that freshmen who described themselves as "more extroverted, easy going, and exuberant and who reported engaging in more social participation, dating behavior, and student body involvement" (p. 64) expected higher levels of involvement, emotional support, intellectuality, formal structure, and innovation than the other freshmen. These personal functioning characteristics appear to be quite similar to social exploration preferences as described by Edwards.

Given the suggestions that adjustment problems may be influenced by unrealistic expectations of a setting and that active social explorers enjoy a better person-environment fit (implying the presence of fewer adjustment problems), one possible conclusion is that active social explorers have more realistic and accurate expectations concerning their social environments than do passive explorers. The present study seeks to examine whether differences in social exploration preference are related in any way to differences in the accuracy of prediction of psychosocial environment.

As discussed above, the groups of freshmen whose expectations and perceptions of psychosocial environment are being compared in the present

study have been determined by both previously examined (gender) and unexamined (social exploration preference) variables. The present study seeks to build on the current empirical base by using multivariate statistical analysis techniques to examine the hypothesis. Previous research in the area of college freshmen's expectations and perceptions of social environment has generally relied upon univariate analysis techniques as the statistical mainstay. However, when an environment is defined using an array of ten separate dimensions, as the URES does, the use of such univariate methodology is likely to be inconclusive. Although differences in specific environmental dimensions were noted in the research discussed above, few discussions addressed the issue of whether these constituted real and substantial difference between the perceptions of a complete profile of a social climate.

For example, McKinnon (Note 2) noted that males perceived more involvement and independence, and less emotional support and formal structure of their living units than did females. However, addressing oneself to the comparison, statistical or otherwise, of merely the separate subscales, makes the comparison of the overall social climates difficult, if not impossible. Even though significant differences were observed between groups on some of the separate dimension subscales, a potentially nasty question remains. That is, how many significant subscale differences constitute an overall environmental difference? Is it four, or six, or eight? How about five significant differences and two trends toward significance? Multivariate techniques that simultaneously examine the complete array of subscales, such as Hotelling's T^2, can reduce some of this

confusion.

There are other compelling reasons for using multivariate techniques. First, they reduce the probability of Type I error that can result from performing separate univariate analyses on each of the various environmental measure subscales. Second, since there are no empirical or conceptual reasons to assume orthogonality among the subscales of the environmental measure (indeed, research appears to indicate the opposite), obviously there should be no statistical reasons to do so either. The use of multivariate techniques obviates the latter need, since the T^2 test accounts for the intercorrelations among the various subscales.

In sum, through the use of univariate statistical techniques for the most part, previous research has indicated that a) freshmen have inaccurate expectations of college life, b) male and female freshmen have varying expectations of dormitory environment and c) in at least one sample, freshmen with varying "personal functioning characteristics" have different expectations and perceptions of social climate. The present study seeks to extend this knowledge in several directions. First, it will employ multivariate analytical methods to re-examine the accuracy of freshmen's predictions of the social climate of their living units, as well as comparing the expectation and perceptions of male and female freshmen concerning their psychosocial environments. Presumably, this will both add to present knowledge (through the utilization of a different statistical technique) and expand the generalizability of current findings (through the study of additional population samples).

Next, it will compare the expectations and perceptions concerning the dormitory social climates of freshmen who have been explicitly assessed as active and passive social explorers. As discussed above, it has been suggested that people with a higher social exploration preference may demonstrate a better person-environment fit across various settings than those with a lower social exploration preference. Furthermore, it has been suggested that adjustment problems may be related in some way to unrealistic expectations of social environment. Therefore, one may suppose that the purported better person-environment fit of higher social explorers may be related in some manner to a more realistic expectation of their psychosocial climate. Consequently, the present study will investigate whether high social explorer freshmen predicted their social climate any more accurately than did low social explorer freshmen.

Specifically, the present study will examine the following six hypotheses:

1) Freshmen, in general, do not accurately predict the future social climate of their dormitory living unit.

2) Male and female freshmen have differing predictions of the social climate of their dormitory hall.

3) Male and female freshmen report differing perceptions of current social climate of their dormitory hall.

4) Freshmen with high and low social exploration preferences have differing predictions of future social climate of their dormitory hall.

5) Freshmen with high and low social exploration preferences re-

port differing perception of current social climate of their dormitory hall.

6) Freshmen with high social exploration preferences predict their future social climate with a greater degree of accuracy than freshmen with low exploration preferences.

METHOD

Subjects

The top five floors in each of two high-rise co-ed dormitories at the University of Maryland were selected as the target areas. The initial sample of subjects of subjects consisted of those 115 newly-entering freshmen who attended the regular floor meetings scheduled by dormitory staff on the first day of freshmen orientation, five days prior to the start of classes.* Twenty-three subjects were excluded from the actual sample for the following reasons: five subjects reported previous college experience; ten were unable to be located during the second data collection period or had moved away from the target floors in the interim; one declined to finish the complete battery; and seven declared a non-white ethnic background.@ The final sample consisted of 92 white, newly-entering freshmen; 58 females, mean age = 17.69 years, S.D. = 0.467; and 34 males, mean age = 17.71 years, S.D. = 0.524.

*Approximately 100 other potential subjects were not in attendance for either the entire orientation weekend or that specific meeting. In order to check for possible sampling bias, eighteen of these freshmen were tested later. No significant differences from the sample were found for age or social exploration preference.

@It was originally intended to examine ethnic background as an additional independent variable, but the low number of non-white respondents precluded this. Consequently, they were dropped from the analyses to preserve a more homogeneous sample.

Measures

The psychosocial climate of each of the target halls was assessed by the University Residence Environment Scales (URES, Moos and Gerst, 1974). This 100-question, true-false, self-report measure yields scores on ten separate environmental press subscales across three general domains. The relationship domain consists of the dimension of involvement and emotional support. The personal growth domain is made up by the dimensions of independence, traditional social orientation, competition, academic achievement, and intellectuality. The system maintenance/system change domain consists of the dimensions of order and organization, student influence, and innovation. Higher scores on each of the subscales indicate the perception of a higher degree of emphasis on that dimension. Two parallel forms of the URES were administered. Form E assesses the respondents' expectations concerning the climate of a future, but as yet unexperienced, environment, while Form R measures the perceptions of a current environment.

The personal characteristic of social exploration preference was measured by the Edwards Social Exploration Scale (Edwards, 1971). This 30-item, true-false, self-report questionnaire assesses the respondents' attitudes and behaviors in adapting to a novel social environment. Higher scores indicate a preference for a more active social exploratory coping style.

Procedure

The Edwards Scale and the URES-Form E were administered to the subjects (in groups) during their first day in residence in the dormitory, as discussed above. The URES-Form R was administered approximately 12 weeks later, again in the context of regular floor meetings spaced over a 10 day period. However, about 30 percent of the original sample did not attend the second meeting and were contacted for individual administrations. The first administration was conducted by three white females, one white male, and one Black male. The second administration was conducted by two white males and one white female.

RESULTS

Individual scores on the URES-Form E were aggregated across the sample (or subsample thereof) to determine the mean expectation score for each of the ten subscale dimensions. Mean scores for the perception of current environment (on each dimension) were calculated similarly from the results of Form R. In addition, each individual's expectation subscale score was subtracted from the corresponding actual perception score to obtain discrepancy scores for each of the ten dimensions for each respondent. These scores were then aggregated across the sample to obtain mean discrepancy scores for the differences between expected future environment and current perceived environment on each of the ten dimensions. These scores are shown in Table 1.

Insert Table 1 here

To test the first hypothesis, that freshmen do not predict the

the social climate of their dormitory living groups accurately, the array of mean discrepancy scores of all ten URES dimensions was examined simultaneously with a one-sample Hotelling's T^2 test in order to determine if it was significantly different than an array of zeroes. This array was significantly non-zero ($T^2 = 124.19$; $F = 11.19$; $df = 10,82$; $p \leq .001$) indicating that, across the ten dimensions, the sample's mean expectations of future social environment was significantly different than its later mean perceptions of the current environment. Thus, H_1 was confirmed.

Since previous research has generally compared the dimension subscales on a separate basis only, the present study also examined the subscales separately to see if the sample had predicted any of the ten subscales accurately. In fact, based on the individual t-tests that comprised the Hotelling's T^2, the freshmen were able to predict only the dimension of innovation with a significant degree of accuracy. These results are presented in Table 1.

As discussed above, arrays of mean expectation scores and mean perception scores were calculated for male and female subjects in order to examine H_2 and H_3. On the basis of two-sample Hotelling's T^2 tests, it was observed that groups of male and female freshmen did not predict future social environment differently from each other, nor did they perceive current environment any differently.

On the basis of scores on the Social Exploration Preference Scale, a median split was performed to obtain two groups: a more active

"high exploration preference" group (n = 46, X = 25.41, S.D. = 2.15) and a more passive "low exploration preference" group (n =46, X = 18.11, S.D. = 3.23). The means of the two groups' exploration preference scores were significantly different (t = 12.77, df = 78, $p < .001$). As discussed previously, arrays of mean expectation scores and mean actual perception scores were calculated for each of the two exploration preference groups. Graphs of the expectation array and the actual perception array for each of the two exploration groups appear in Figures 1 and 2, respectively.

Based on a two-sample Hotelling's T^2 to test the fourth hypothesis, high exploration preference group subjects reported significantly different expectations concerning their psychosocial environments than did low exploration preference group members ($T^2 = 23.39$; $F = 2.11$; df = 10,81; $p = .03$). Thus, H_4 was confirmed.

Based on individual t-tests, higher explorers predicted higher levels on the dimension of emotional support ($p = .04$), intellectuality ($p = .03$), order and organization ($p = .04$), and student influence ($p = .02$), as well as lower levels on the dimension of independence ($p = .03$).

Insert Figure 1 about here

Similarly, in examining the fifth hypothesis, a two-sample T^2 indicated that the high exploration group subjects perceived their

present social environment significantly differently from the low exploration group subjects (T^2 = 29.05; F = 2.62; df = 10,81; p = .008). Thus, H_5 was confirmed, as well. An examination of the t-tests for the separate subscale scores reveals that the higher explorers reported perceiving higher levels of emotional support (p = .005), intellectuality (p = .001), and innovation (p = .05).

Insert Figure 2 about here

To test H_6, the discrepancy scores of the high exploration group were compared with those of the low exploration group using a two sample Hotelling's T^2. No significant differences were observed between the groups, indicating that high explorer freshmen did not predict their environment with any more accuracy than low explorer freshmen.

DISCUSSION

The present study examined the expectations of future and perceptions of current psychosocial climate by freshmen in general and compared the differences between groupings by gender as well as social response patterns. In contrast to much of previous research, multivariate analysis techniques were selected as the most efficacious statistical method to examine this data. The previously discussed rationale for this will be summarized briefly here.

When examining perceptions of environment that are based upon multiple dimensions, as does the URES, it may be misleading to rely on just the comparisons of individual subscales. If this is done, it may be very difficult to determine if the environments differ across the overall level, or merely on several individual dimensional aspects. This confusion makes generalization concerning these environmental differences less certain and probably less justifiable. However, using multivariate techniques that examine all of the individual subscales simultaneously allows for more conclusive results.

For example, the previous literature has reported that freshmen have inaccurate expectations of future social climate of their living groups across several separate dimensions. The replication of these results as obtained by the simultaneous examination of the entire array of URES dimensions in the present study makes that finding all the more convincing.

On the other hand, even though earlier research has suggested gender differences in the expectations and experienced perceptions of social climate by entering freshmen, these differences are only apparent on an individual subscale basis. The simultaneous testing of all ten URES dimensions indicates that, although there are some individual subscale differences, the arrays of overall psychosocial environment perception (expected and experienced) show no significant differences on the basis of gender.

In addition, earlier research noted that freshmen reporting more

active "personal functioning characteristics" differed significantly from other freshmen in their expectations of five separate subscale dimensions. The present study found that those freshmen in the more active social exploration preference group had significantly different expectations than those in the more passive exploration group on three of those same five subscales (as well as two others), but, more importantly, the complete array of expectaton dimensions was significantly different for the two groups. In addition, it is valuable to note that a significant difference was observed for a least one subscale in each of the three general domains of relationship, personal growth, and system maintenance/system change, for the expectation dimensions as well as for perception of current environment. This makes the conclusion of a true overall enviromental difference all the more convincing.

Previous researchers have suggested that people with higher social exploration preferences interact with their environments in significantly different ways than people with lower exploration preferences (e.g., Edwards, 1971, 1979; Kelly, 1979, Perl, Note 4). However, the wide range of potential influences on these interaction differences have yet to be clearly delineated. It seems reasonable to assume that one's expectations of the demands and structures of a future setting as well as one's perceptions of the present setting can both have a

tremendous impact upon person-environment interaction. Therefore, the results of the present study tend to support the notion that social exploration preference can be a powerful variable in the study of person-environment interaction.

These results also suggest further speculation about the mechanisms through which people come to have certain expectations about their social environment and how these expectations can possibly affect their later interactions with and perceptions of that setting. For example, it was observed that high social explorers expected lower levels of independence on their living unit than did the lower explorers. One possible explanation for this could be the previous experiences of active and innovative social explorers being constrained by relatively inflexible social settings. Interestingly, these same high explorers later reported perceiving their settings as more innovative than did the low explorers. Perhaps the high explorers perceived that they had more behavioral latitude than they expected and consequently rated their environment as being more innovative. Of course these are merely speculations and need to be explored further by linking up these reports of perceived environment with actual behavioral events on the setting, as well as connecting expectation to previous life experiences.

In addition, although high exploration preference subjects have been previously described as more socially adaptive (e.g. Edwards, 1979; Perl, Note 4), the present study observed that they do no pre-

dict their social environments any more accurately than low exploration preference subjects. This may indicate that a more socially adaptive person may not necessarily be better able to forsee the demands and features of a social setting than others, but merely be better able to respond to these demands as they become more apparent. Future research, especially longitudinal studies, are needed to illuminate this point. It would be interesting to see, for example, whether people with varying social exploration preferences respond to different environmental cues, or to different intensities of similar cues. Another interesting dependent variable would be the speed and magnitude of change in social behavior as environmental demands became apparent.

However, there is yet another level beyond that. We need to look more deeply at the mechanisms by which these expectations are formed by different people. For entering college students, some obvious influences include books, newspapers, television, and movies, as well as parents and older friends and siblings. It is important that these informal (and quite possibly misinformed) sources be supplemented with more reliable and valid information, such as that afforded by the rigorous assessment of the actual environment in question.

If realistic expectations do turn out to have a significant impact upon better adjustment, then any aid in the formation of such appropriate expectations could be a powerful preventive intervention. Certainly a clearer understanding and communication of the various environmental presses of different university living groups could be

very useful in successfully orienting new freshmen to both college in general and their dormitories in particular. Or perhaps such advance knowledge would allow entrants to select such settings in which they might enjoy the most advantageous person-environment fit, thus becoming happier, healthier, and better students. Similarly, it is not inconceivable to extend these procedures so as to ease the entry process into almost any type of organization or institution. It behooves community psychologists to expand our efforts in cultivating empirical and conceptual seedlings into positive preventive interventions.

Table 1. Mean discrepancy scores for the total sample of Freshmen (n=92) on URES dimensions.

URES dimension	Mean Discrepancy Score *	Standard error of the mean	t value[@]	p value	df
Involvement	- .72	.36	-1.98	.05	91
Emotional Support	.65	.28	2.32	.02	91
Independence	.74	.24	3.08	.003	91
Traditional Social Orientation	-1.36	.23	-5.83	.000	91
Competition	-1.42	.25	-5.61	.000	91
Academic Achelvement	-.89	.26	-3.48	.001	91
Intellectuality	-.50	.24	-2.04	.04	91
Order and Organization	-2.36	.38	-6.21	.000	91
Student Influence	.61	.23	2.62	.01	91
Innovation	.02	.22	.10	.92	91

*Mean discrepancy scores were calculated by subtracting each individual's expectation subscale scores from the corresponding actual perception score and aggregating across the sample. Negative discrepancy scores represent the expectations of a higher degree of an environmental dimension than was subsequently perceived.

[@]The t values were part of the Hotelling's T^2 which was calculated to compare the array of mean discrepancy scores to an array of zeroes.

Figure 1 Mean URES expectation scores by subscale for exploration preference

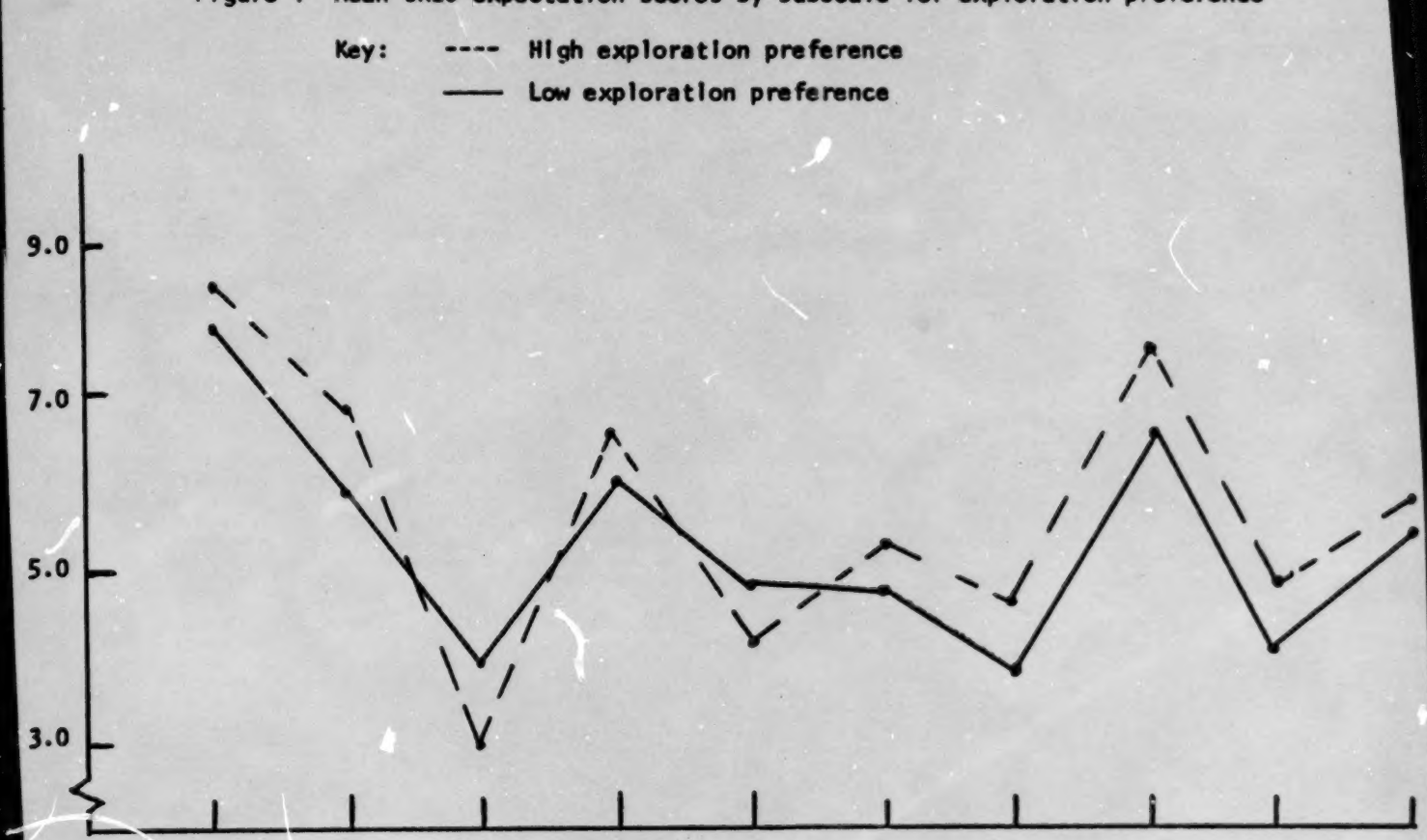
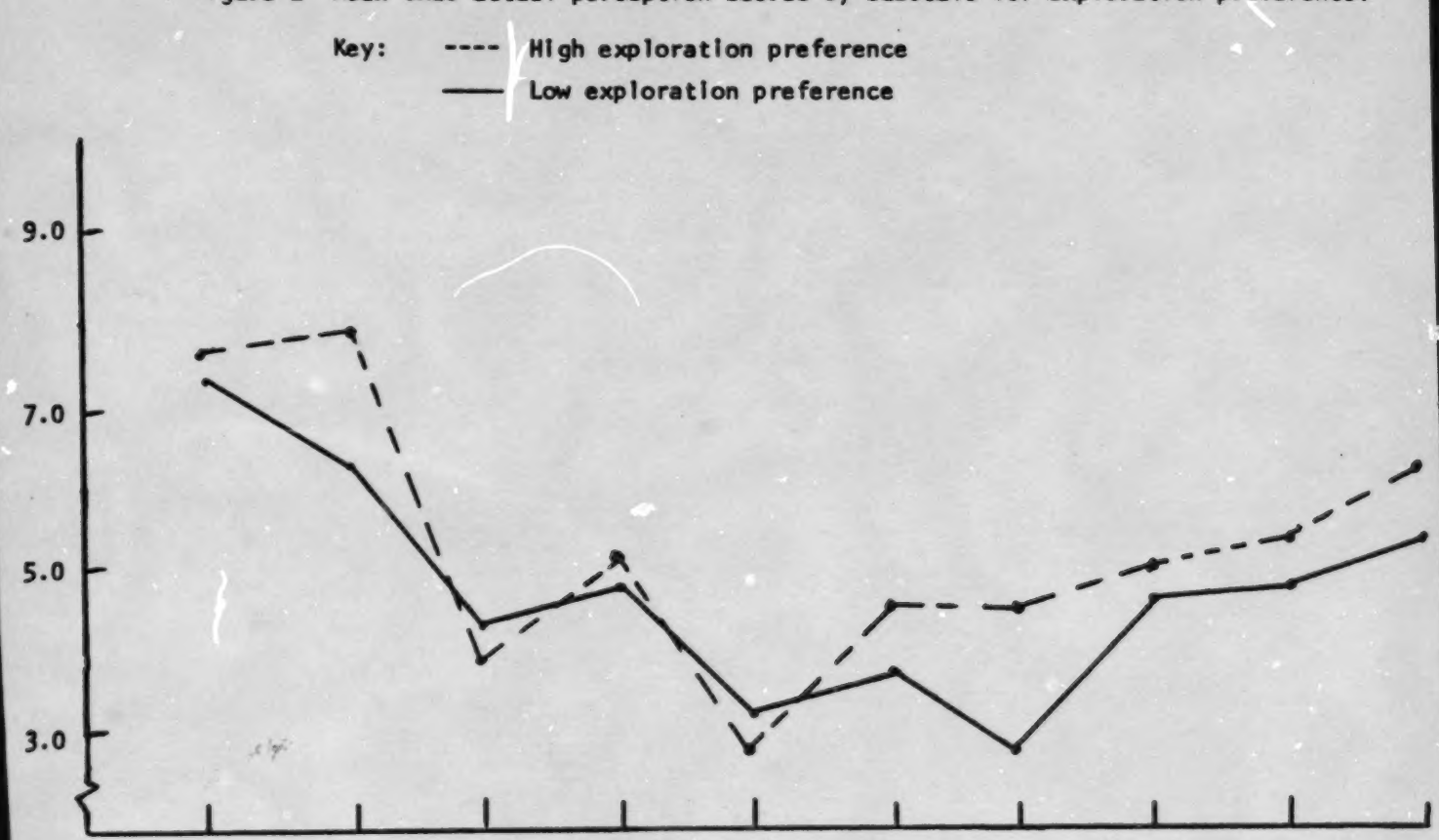


Figure 2 Mean URES actual perception scores by subscale for exploration preference.



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